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PHA 4159.33 (3203/1B/US)
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Michael S. South, et al.

Art Unit 1614

Serial No. 10/680,723

Filed October 7, 2003

Confirmation No. 2648

For SUBSTITUTED POLYCYCLIC ARYL AND HETEROARYL PYRIMIDINONES
USEFUL FOR SELECTIVE INHIBITION OF THE COAGULATION CASCADE

March 5, 2004

COMMISSIONER FOR PATENTS
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SIR:

INFORMATION DISCLOSURE STATEMENT

* In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the
* duty of disclosure set forth in 37 C.F.R.1.56, applicants submit the attached PTO/SB/08A for
consideration by the Patent and Trademark Office in the above-entitled application and to be
made of record therein.

* The references listed on the attached PTO/SB/08A have been previously submitted in
parent application Serial No. 09/716,951 and, therefore, in accordance with MPEP 609, are not
being provided at this time.

Respectfully submitted,

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PTO/SB/08A INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/680,723
				Filing Date	October 7, 2003
				Confirmation Number	2648
				First Named Inventor	Michael S. South, et al.
				Group Art Unit	1614
				Examiner Name	To be assigned
Sheet	1	of	6	Attorney Docket No.	PHA 4159.33 (3203/1B/US)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	1	4,489,096	B1	Terao et al.	12-18-1984
	2	4,851,413	B1	Terao et al.	07-25-1989
	3	4,992,469	B1	Ozawa et al.	02-12-1991
	4	5,008,267		Katakami, et al.	04-16-1991
	5	5,304,658	B1	Terao et al.	04-19-1994
	6	5,441,960		Bernstein et al.	08-15-1995
	7	5,656,645		Tamura et al.	08-12-1997
	8	5,658,930		Tamura et al.	08-19-1997
	9	5,668,289	B1	Sanderson et al.	09-16-1997
	10	5,741,819	B1	Illig et al.	04-12-1998
	11	5,792,779	B1	Sanderson et al.	08-11-1998
	12	5,861,380	B1	Gyorkos et al.	01-19-1999
	13	5,866,573	B1	Sanderson et al.	02-02-1999
	14	5,869,487	B1	Coburn et al.	02-09-1999
	15	5,872,138	B1	Naylor-Olsen et al.	02-16-1999

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

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	16	6,011,158	B1	Tamura et al.	01-04-2000
	17	6,037,356	B1	Lu et al.	03-14-2000
	18	6,180,627	B1	Blagg et al.	01-30-2001

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office	Number ⁴	Kind Code ² (if known)			
	19	DE	198 51 421	A1	Boehringer Ingelheim Pharma KG	05-11-2000	
	20	EP	0 354 495	A1	Godecke Aktiengesellschaft	02-14-1990	
	21	EP	528 633	B1	Zeneca Limited	10-18-2000	
	22	EP	826 671	A1	The Green Cross Corporation	03-04-1998	
	23	EP	936 216	A1	Nippon Kayaku Kabushiki Kaisha	08-18-1999	
	24	EP	940 400	A1	Yoshitomi Pharmaceutical Industries, Ltd.	09-08-1999	
	25	EP	997 474	A1	Pfizer Inc.	05-03-2000	
	26	WO	93/21214	A1	Zeneca Limited	10-28-1993	
	27	WO	96/18644	A1	Corvas International Inc.	06-20-1996	
	28	WO	96/33974	A1	The Green Cross Corporation (abstract)	10-31-1996	

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	29	WO	96/39380	A1	3-Dimensional Pharmaceuticals, Inc.	12-12-1996	
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	32	WO	97/30708	A1	Merck & Co., Inc.	08-28-1997	
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	34	WO	97/46207	A2	Corvas International Inc.	12-11-1997	
	35	WO	98/08840	A1	Merck & Co., Inc.	03-05-1998	
	36	WO	98/09949	A1	Nippon KayKabushiki Kaisha (abstract)	03-12-1998	
	37	WO	98/09987	A1	Biochem Pharma, Inc.	03-12-1998	
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	39	WO	98/16525	A1	Cor Therapeutics, Inc.	04-23-1998	
	40	WO	98/16547	A1	Cor Therapeutics, Inc.	04-23-1998	
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	45	WO	98/50420	A1	Akzo Nobel N.V.	11-12-1998	
	46	WO	99/00121	A1	Eli Lilly and Company	01-07-1999	

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	47	WO	99/00126	A1	Eli Lilly and Company	01-07-1999	
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	50	WO	99/26920	A1	Corvas International, Inc.	06-03-1999	
	51	WO	99/26926	A1	3-Dimensional Pharmaceuticals, Inc.	06-03-1999	
	52	WO	99/36426	A1	Warner-Lambert Company	07-22-1999	
	53	WO	99/43660	A1	Neurogen Corporation	09-02-1999	
	54	WO	99/48892	A1	Merck & Sharp & Dohme Limited	09-30-1999	
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	56	WO	99/61442	A1	Merck & Co., Inc.	12-02-1999	
	57	WO	99/62538	A1	Warner-Lambert Company	07-22-1999	
	58	WO	99/64446	A1	3-Dimensional Pharmaceuticals, Inc.	12-16-1999	
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	64	WO	00/69826	A1	Monsanto Company	11-23-2000	

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	65	WO	00/69832	A1	Monsanto Company	11-23-2000	
	66	WO	00/69833	A1	Monsanto Company	11-23-2000	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	67	COBURN, C.A., "Small-molecule direct thrombin inhibitors 1997-2000." Expert Opinions on Therapeutic Patents, 2001, 721-738, Vol. 11, No. 5	
	68	XP-002182132 - DARVAS, et al., "Investigation of the Common Mechanism of Action of Antibacterial Compounds Containing .gamma.-pyridone-.beta.-carboxylic acid Structure by Principal Component." Arzneim.-Forsch., 1979, pp. 1334-1339, Vol. 29, 9.	
	69	HANDIN, R., "Bleeding and Thrombosis." Harrison's Principles of Internal Medicine, 12th Edition, 1991, pp. 348-353, McGraw-Hill, Inc., New York.	
	70	XP-002172033 - KOHAMA et al., "Preparation of Piperidinylxyacetylaminobenzoylalanine Derivatives and Analogs as Antithrombotics." JP 07,233,148.	
	71	MAJERUS, et al. "Anticoagulant, Thrombolytic, and Antiplatelet Drugs." Goodman & Gilman's The Pharmacological Basis of Therapeutics, Ninth Edition, 1996, pp. 1341-1359, McGraw-Hill, New York.	
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	73	PATEL et al., "Directed Aminomethylation of 3-Hydroxy-3(1H)-pyridinones and 3-hydroxy-4(1H)-pyridinones: Synthesis of iso-Deferiprone." Tetrahedron, 1996, pp. 1835-1840, Vol. 52, No. 5.	
	74	SANDERSON, et al., "L-373,890, An Achiral, NonCovalent, Subnanomolar Thrombin Inhibitor." Bioorganic & Medical Chemistry Letters, 1997, pp. 1497-1500, Vol. 7, No. 12.	
	75	XP-002182410 - TRE COURT et al., "First Synthesis of (+)-harzianopyridone by Metalation of Polysubstituted O-pyridylcarbamates." J. Heterocycl. Chem., 1995, pp. 1117-1114, Vol. 32, No. 4.	

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